



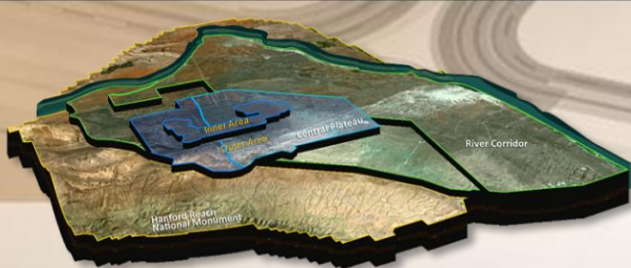
Groundwater Update



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HANFORD SITE GROUNDWATER NUMBERS

13.95 billion gallons of contaminated groundwater treated



239 tons of contaminants removed in all pump and treat systems since the facilities began operating



2.4 billion gallons of groundwater treated in 2015



84 tons of contaminants removed in 2015



Groundwater Key Focus Areas

- Expand pump-and-treat systems
 - Continue pump-and-treat operations
 - Install and connect new and existing wells to maximize remediation effectiveness
 - Operate uranium treatment system
- Continue progress on decision documents
- Groundwater strategy
 - Stop key contaminants from entering the river and clean up groundwater to drinking water standards



*200 West Groundwater
Pump-and-Treat Facility*



*Installing aquifer
sampling tubes*

Groundwater Accomplishments

Accomplishments in FY2015

Soil and Water Remediation – Groundwater, RL-0030

- Continued integration of site-wide groundwater and vadose zone cleanup activities; groundwater contamination monitoring; operations, maintenance, and necessary modifications of existing remediation systems
 - Completed construction of uranium treatment system at the 200 West Pump-and-Treat Facility
 - Completed construction of pipeline between 200 East and 200 West Areas for treatment of 200 East groundwater
- Continued operation of the River Corridor and Central Plateau Area pump-and-treat facilities, treating 2.4 billion gallons of contaminated groundwater, removing 84 tons of contaminants
- Continued progress towards obtaining final remediation records of decision (RODs) in the River Corridor
 - Initiated remedial investigation for the orchard lands on the River Corridor



Pipeline between 200 East and 200 West Areas



Uranium ion exchange skid and influent tank at the 200 West Pump-and-Treat Facility

Groundwater Accomplishments

Planned Accomplishments in FY2016

Soil and Water Remediation – Groundwater, RL-0030

- Continue integration of site-wide groundwater and vadose zone cleanup activities; groundwater contamination monitoring; as well as operations, maintenance, and necessary modifications of existing remediation systems
 - Initiate new uranium treatment at 200 West Pump-and-Treat Facility in accordance with the 200-UP-1 Record of Decision
 - Initiate operations of 200 East Area groundwater treatment at 200 West Pump-and-Treat Facility
 - Expand 200 West Pump-and-Treat Facility
 - Initiate operations of the expanded transient perched water treatment system
 - Initiate ERDF leachate treatment at 200 West Pump-and-Treat Facility



200 West Pump-and-Treat Facility

Groundwater Accomplishments

Planned Accomplishments in FY 2016 (cont'd)

Soil and Water Remediation – Groundwater, RL-0030

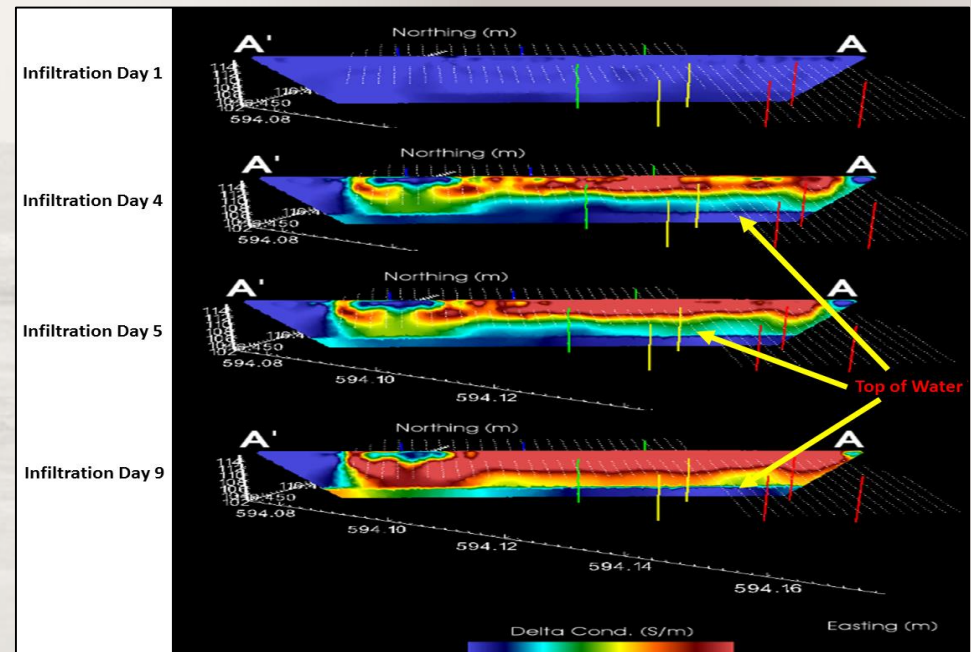
- Continue operation of River Corridor and Central Plateau Area pump-and-treat facilities for treatment of at least 2.1 billion gallons of contaminated groundwater (removing uranium, carbon tetrachloride, nitrates, hexavalent chromium and technetium-99)
- Continue to meet well drilling commitments
TPA milestone M-024
- Continue progress towards obtaining final remediation RODs for the River Corridor and Central Plateau
 - Complete remedial investigation of the orchard lands on the River Corridor (100-OL-1)
- Continue ROD implementation activities for the 300 Area Uranium Sequestration and well drilling for 100-F/IU monitoring



Injection wells and infiltration field tubing in 300 Area

300-FF-5 Uranium Sequestration

- Purpose is to capture the uranium and prevent it from becoming mobile and getting into the aquifer and eventually the Columbia River
- Stage A is a test phase to prove that the treatment method works as expected
- Infrastructure installation from July to October of 2015, infiltration completed in November 2015
- A report with final results scheduled for May 2016
- Lessons learned will be incorporated in Stage B (projected for FY16 – FY17)



Variations of color represent changes in Stage A soil conductivity showing phosphate saturation levels

300-FF-5 Uranium Sequestration Location

